

File 13/1/813

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LOOSE MINUTE

D/SSC/SM511/870/01/1401

3 March 1989

SM505 (Mr Chandler)
SM611 (Mr Evans)
NA112 (Mr Briscoe)
DMS(N) (Mr Morton)
Subs 11 (Mr Jordan) *TH*
Sec(FS) (Mr Whiteway)
SM511 (Mr Pearson)

UNDERWATER STORAGE OF DECOMMISSIONED NUCLEAR SUBMARINES

Reference: Draft Feasibility Study D/SSC/SM505/867/7/22 dated February 1989

1. The reference considers the general requirements for underwater storage of a decommissioned nuclear submarine. This draft necessarily draws on previous studies for Dreadnought disposal. A different form of presentation would be required for the general problem of disposal of '18 SSNs and 4 SSBNs'. The SSBNs may present a substantially different problem.

2. My detailed comments are given below; all assume an application for Dreadnought.

Preparation

With the R.C. filled with water, there would probably be no requirement for a relief valve. I suspect there would be sufficient elastic flexibility in the structure to take up compression/thermal effects. I do not think the bulkheads would be subjected to large differential pressure. This may help the structural and containment justification.

Preparation of Hull for Towing

The preparation for towing is a key issue. Certainly the measures presented (full survey of all tanks, full hull preservation and renewal of hull anodes) will be required. However, we may need more than this. If we are to have a solution for 'not less than 20 years and not more than 100 years' we probably need contract/ARE advice. 99.9 years is completely outside our experience.

Towing skeg and dummy propeller. The tow is still appreciable (6 days?). As we have a current solution, I suggest we use it.

Cutting down the fin - this will increase GM. I would need to check the new predicted condition to determine if this is necessary. Is the underwater profile comment aimed at post scuttling?

I support the rest of this section.

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